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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/535,063	05/09/2006	Catherine Robert	S1022.81243US00	1852
46329 7590 04/06/2007 STMicroelectronics Inc. c/o WOLF, GREENFIELD & SACKS, P.C. 600 Atlantic Avenue BOSTON, MA 02210-2206			EXAMINER MOLL, JESSE R	
			ART UNIT 2181	PAPER NUMBER
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
3 MONTHS		04/06/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No. 10/535,063	Applicant(s) ROBERT ET AL.	
	Examiner Jesse R. Moll	Art Unit 2181	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 January 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Withdrawn Objections / Rejections

1. Applicant, via amendment, has overcome the rejection of claims 1-7 under 35 U.S.C. 112, second paragraph. The rejection has been respectfully withdrawn.
2. Applicant, via amendment, has overcome the objection to the drawings. The objection has been respectfully withdrawn.
3. Applicant's arguments regarding the objection to the specification were persuasive and the objection has been respectfully withdrawn.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-7 are rejected under 35 U.S.C. 102(b) as being anticipated by Cheon (U.S. Patent Application No. 6,070,210), herein referred to as Cheon'210.

Referring to claim 1, Cheon'210 discloses, as claimed, a method comprising: transmitting digital messages which are representative of first specific events (such as the event for writing to memory 110) depending on the execution of an instruction sequence by a microprocessor (200, see Fig. 2), to an analysis tool (Memory 110; see fig. 2) through output terminals (through DATA port, see Fig. 2) of a monitoring circuit (DMA device 100, see Fig. 2) integrated to the microprocessor (200, see Fig. 2);

- transmitting to the monitoring circuit (DMA device 100, see Fig. 2) through dedicated accesses: a request signal (received through DREQ see Fig. 2) for the sending of a message associated with a specific event from among second specific events (the events for sending data from SCSI 120 to DMA device 100, see Fig. 2) independent from the execution of the instruction sequence by the microprocessor and a signal of characteristic data (through DATA port in memory 110., see Fig. 2) associated with said specific event from said second specific events;

- having the monitoring circuit (DMA device 100, see Fig. 2) read said request message (received through DREQ see Fig. 2) and, if resource management conditions are fulfilled (such as in the situation when memory 10 is available for being written), transmitting through a dedicated access an acknowledgement message (through DACK, see Fig. 2) and storing said characteristic data signal (stored in such as registers inside DMA device 100 for temporarily storing data sent from SCSI controller 120 see Fig. 2); and

- transmitting (through DATA port in memory 110., see Fig. 2) a digital message representative of the stored characteristic data signal to the analysis tool (Memory 110; see fig. 2).

Claim 5 recites equivalent limitations as claim 1, but is claimed as an apparatus. Claim 5 is rejected as the apparatus using the method of claim 1.

As to claim 2, Cheon'210 also discloses: the method of claim 1, in which the resource management conditions are fulfilled when the monitoring circuit (DMA device 100, see Fig. 2) is not transmitting digital messages representative of the first specific events (note this is in the situation when DMA device is available to be used).

As to claim 3, Cheon'210 also discloses: the method of claim 1, in which the digital message representative of the stored data signal comprises an identifier (such as valid/invalid bit) and the characteristic data signal (the data bits).

As to claim 4, Cheon'210 also discloses: the method of claim 1, in which the characteristic data (DATA) signal corresponds to the values on input terminals (such as the MBR for CPU connecting the data bus in the Cheon'210's system) of the microprocessor (200, see Fig. 2).

As to claim 6, Cheon'210 also discloses: the device of claim 5, in which the detection means (such as ALU in the CPU of the Cheon'210's system), the request transmission means (SCSI controller 120, see Fig. 2), the monitoring circuit (DMA device 100, see Fig. 2), and the microprocessor are integrated in a same chip (see Fig. 2).

As to claim 7, Cheon'210 also discloses: the device of claim 5, in which the detection means (such as ALU in the CPU of the Cheon'210's system) is connected to input terminals (such as the MBR for CPU connecting the data bus in the Cheon'210's system) of the microprocessor (200, see Fig. 2).

Response to Arguments

6. Applicant's arguments filed 16 January 2007 regarding the rejection of claims 1-7 under 35 USC 102 have been fully considered but they are not persuasive.

7. Regarding the argument directed to "a monitoring circuit", Examiner disagrees. The DMA controller monitors for DMA requests. Therefore, it is considered to be a monitoring circuit.

8. Regarding the argument directed to "an analysis tool", Examiner disagrees. The term "analysis tool" merely requires a tool which can be used for analysis and imparts no structural limitations. Therefore, a memory is considered to be an analysis tool.

9. Regarding the argument directed to "representative of first specific events", Examiner disagrees. The request sent to DREQ is representative of itself. The content of the request depends on the request itself (the transfer to memory is interpreted the same way). The claim language does not limit the message to represent the "type" of

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event, or whether the even does or does not depend on execution of an instruction sequence. The claim merely requires that both types of events occur. Additionally, the claims only distinguish the two types by whether they depend from a group of instructions. Certainly, instructions (said instruction sequence) exist in the processor which cause the SCSI controller to send a message to the DMA controller.

Conclusion

10. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

11. Let it be noted that there is a new examiner of record on the case.

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12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jesse R. Moll whose telephone number is (571)272-2703. The examiner can normally be reached on M-F 10:00 am - 6:30 pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Donald A. Sparks can be reached on (571)272-4201. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

13. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JM 4/1/2007

Jesse R Moll
Examiner
Art Unit 2181



DONALD SPARKS
SUPERVISORY PATENT EXAMINER